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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,792	04/16/2004	John Geoffrey Chan	9215	9078

27752 7590 07/06/2007  
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EXAMINER
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KARLS, SHAY LYNN

ART UNIT	PAPER NUMBER
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1744

MAIL DATE	DELIVERY MODE
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07/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/825,792		CHAN ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Shay L. Karls		1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/15/07 has been entered.

### *Drawings*

The drawings were received on 5/15/07. These drawings are acceptable.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12-22, 25-28 and 30, 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Psiharis (USPN 2253210) in view of Volpenhein (WO 98/18364).

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Psiharis teaches a toothbrush comprising an elongated handle (10) and a head. The elongated head comprises a longitudinal axis, a top face and bottom face. The top face comprises a brushing surface (14, figure 1) and the bottom surface comprises a massaging surface (figure 4 and 5). The brushing surface comprises generally circular tufts. The massaging surface comprises a plurality of projections oriented in rows (figures 4 and 5).

With regards to claims 13 and 26, the projections are generally conical nubs (30).

With regards to claims 14, 15, 25 and 30, the projections are in rows transverse to the longitudinal axis of the brush (figure 5) or parallel to the longitudinal axis of the brush (figure 4).

With regards to claim 16, the projections cover a substantial portion of the bottom face.

With regards to claim 17, the projections are uniform in shape (figures 4-5).

With regards to claim 19, the projections are nubs (30; figure 4).

With regards to claim 20, the projections are conical (30).

With regards to claims 21-22 and 28, the head further comprises ridge like elements (figure 5) that are arcuate in shape (they have a curved top surface).

Regarding claim 33, Psiharis teaches a toothbrush comprising an elongated handle (10) and a head. The elongated head comprises a longitudinal axis, a top face and bottom face. The top face comprises a brushing surface (14, figure 1) and the bottom surface comprises a massaging plate (figure 4 and 5). The brushing surface comprises a collection of bristle tufts. A surface of the massaging pate comprises a plurality of projections oriented in rows (figures 4 and 5).

With regards to claim 34, the massaging plate is secured to the bottom face of the toothbrush head (figure 3 and 7). See figure below.

With regards to claim 35, the massaging plate has a top surface that is generally coplanar with the bottom face of the toothbrush head (figure 8, 9 and 10).

With regards to claim 37, the massaging plate is elongate (figure 4 and 5).

With regards to claim 39, the top face comprises a plurality of resilient elements. See figure below.

With regards to claim 40, the projections are conical nubs (30; figure 4).

With regards to claim 41, the bottom face is generally planar (figure 4 and 5).

With regards to claim 42, the top face is generally planar (figure 3 and 7).

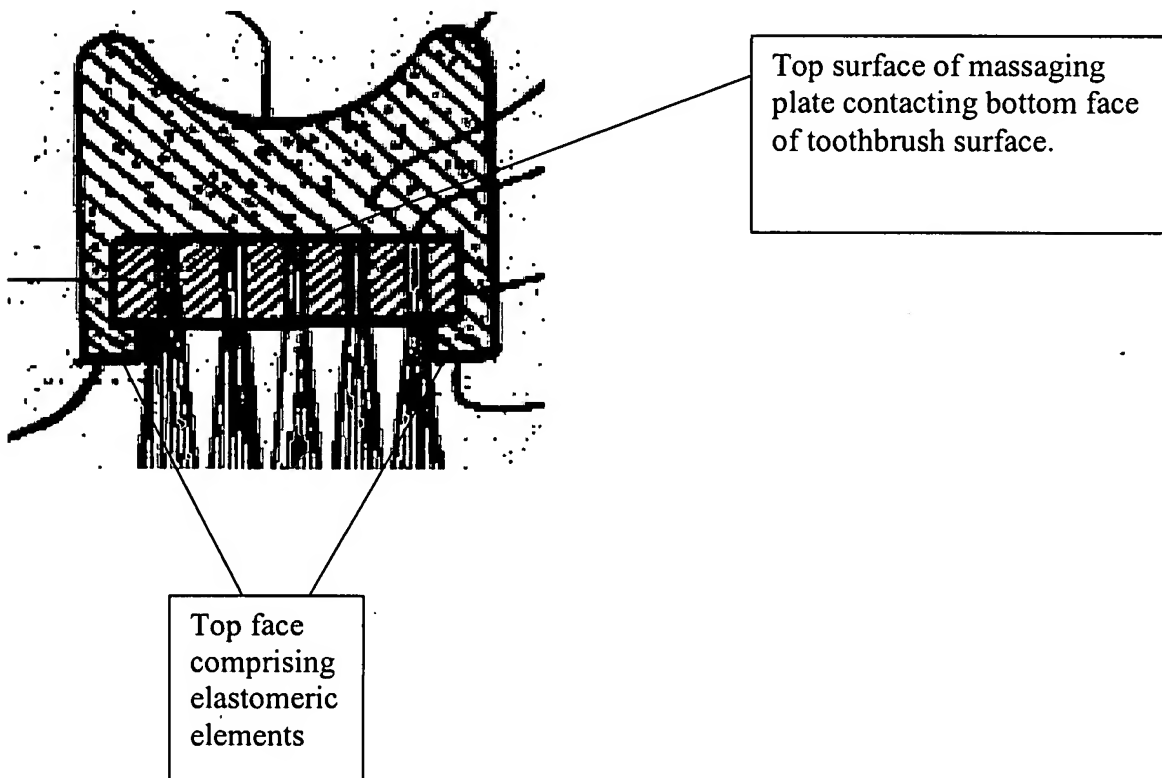
Psiharis teaches all the essential elements of the claimed invention however fails to teach that the plurality of projections are oriented in staggered rows (claims 12, 25, 30 and 33). The reference teaches that the massaging plate and projections are made from a resilient material however fails to teach using an elastomeric material (claims 18, 27, 36, 38 and 39). Additionally, the reference fails to teach that the toothbrush head is made from a polymer (claim 36).

Volpenhein teaches a toothbrush head with staggering rows of projections (figure 2a). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to stagger the rows of projections on Psiharis as taught of Volpenhein because Applicant has not disclosed that staggering rows provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the projections taught by Psiharis or the claimed staggering as taught by Volpenhein because both projections perform the same function of massaging a user's gums equally well. Therefore, it would have been obvious to one

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of ordinary skill in the art to modify Psiharis with Volpenhein to obtain the invention as specified in claims 18, 25, 30 and 33.

Regarding the material used for the massaging plate, the projections and the toothbrush head, Psiharis fails to teach using an elastomeric material for the massaging plate and projections and fails to teach using a polymer such as polypropylene, polystyrene, polyethylene, etc. for the toothbrush head. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an elastomeric material for the massaging plate and projections as well as use a polymer such a polypropylene, polystyrene, polyethylene, etc., for the toothbrush head since it has been held within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. *In re Leshin*, 125 USPQ 416.



**Claims 23-24, 29, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Psiharis and Volpenhein as stated above and further in view of Kott (USPN 3196299).**

Psiharis and Volpenhein teach all the essential elements of the claimed invention however fail to teach that the handle comprises a motor that is operatively connected to the brushing surface and the massaging surface. Kott teaches an electric handle for converting a regular toothbrush to an electric toothbrush. The handle allows the toothbrush to vibrate or oscillate automatically. The toothbrush head pulses back and forth when inserted into the motorized handle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a motorized handle as taught by Kott on the conventional toothbrush handle of Psiharis and Volpenhein so that the bristles and the massaging elements are subjected to vibrations or pulses to enhance the cleaning capabilities of the toothbrush.

***Response to Arguments***

Applicant's arguments, filed 5/17/07, with respect to Maser ('551) have been fully considered and are persuasive. The rejection of Maser has been withdrawn.


However, upon further consideration, a new ground(s) of rejection is made in view of Volpenhein ('364) and Kott ('299). Volpenhein teaches a flat massaging surface in figure 2a with staggered rows, while Kott teaches a device for converting a conventional toothbrush into an electric toothbrush. Both references, in combination with Psiharis, meet the claimed limitations.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Shay L Karls  
Patent Examiner  
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